

Amendments to the Claims.

This listing of claims replaces all prior versions and listings of claims in the application:

Claims:

Claim 1(currently amended): A method of forming a self-aligned contact hole suitable for a semiconductor substrate having a pair of gate electrodes, comprising the steps of: forming a nitride etching stop layer over the gate electrode and the semiconductor substrate; forming an oxide insulating layer on the nitride etching stop layer; and plasma-etching the oxide insulating layer by an etching gas containing ~~consisting of~~ C_5F_8 and CHF_3 so as to form a self-aligned contact hole between the pair of gate electrode, thereby equalizing the etching rate to the etching stop layer at the top corner and the bottom of the contact hole.

Claim 2(original): A method of forming a self-aligned contact hole as claimed in Claim 1, wherein the oxide insulating layer is BPSG.

Claim 3(original): A method of forming a self-aligned contact hole as claimed in Claim 1, wherein the oxide insulating layer is silicon oxide formed by a reactive gas containing TEOS.

Claim 4(Previously presented): A method of forming a self-aligned contact hole as claimed in Claim 1, wherein the nitride etching stop layer is silicon nitride.

Claim 5(Previously presented): A method of forming a self-aligned contact hole as claimed in Claim 1, wherein the nitride etching stop layer is silicon oxy-nitride.

Claim 6(original): A method of forming a self-aligned contact hole as claimed in Claim

1, wherein the etching gas further comprises an inert gas.

Claim 7(original): A method of forming a self-aligned contact hole as claimed in Claim 6, wherein the inert gas is argon gas.

Claim 8(Original): A method of forming a self-aligned contact hole as claimed in claim 1, wherein the C_5F_8/CHF_3 mixture ratio of the etching gas is between 0.4 and 0.75.

Claim 9(currently amended): A method of forming a self-aligned contact hole suitable for a semiconductor substrate having a pair of gate electrodes, comprising the steps of: forming a nitride etching stop layer over the gate electrodes and the semiconductor substrate;

forming an oxide insulating layer on the nitride etching stop layer; and plasma-etching the oxide insulating layer by an etching gas ~~containing~~ consisting of C_4F_6 and CHF_3 so as to form a self-aligned contact hole between the pair of gate electrode, thereby equalizing the etching rate to the etching stop layer at the top corner and the bottom of the contact hole.

Claim 10(original): A method of forming a self-aligned contact hole as claimed in Claim 9, wherein the oxide insulating layer is BPSG.

Claim 11(original): A method of forming a self-aligned contact hole as claimed in Claim 9, wherein the oxide insulating layer is silicon oxide formed by a reactive gas containing TEOS.

Claim 12(Previously presented): A method of forming a self-aligned contact hole as claimed in Claim 9, wherein the nitride etching stop layer is silicon nitride.

Claim 13(Previously presented): A method of forming a self-aligned contact hole as claimed in Claim 9, wherein the nitride etching stop layer is silicon oxy-nitride.

Claim 14(original): A method of forming a self-aligned contact hole as claimed in Claim 9, wherein the etching gas further comprises an inert gas.

Claim 15(original): A method of forming a self-aligned contact hole as claimed in Claim 13, wherein the inert gas is argon gas.

Claim 16(currently amended): A method of forming a self-aligned contact hole suitable for a semiconductor substrate having a pair of gate electrodes, comprising the steps of: forming a nitride etching stop layer over the gate electrodes and the semiconductor substrate;

forming an oxide insulating layer on the nitride etching stop layer; and plasma-etching the oxide insulating layer by an etching gas ~~containing~~ consisting of C_nF_{2n-2} and CHF_3 , wherein $n=4$ or 5 , so as to form a self-aligned contact hole between the pair of gate electrode, thereby equalizing the etching rate to the etching stop layer at the top corner and the bottom of the contact hole.

Claim 17(Previously presented): A method of forming a self-aligned contact hole as claimed in Claim 16, wherein the oxide insulating layer is BPSG.

Claim 18(Previously presented): A method of forming a self-aligned contact hole as claimed in Claim 16, wherein the oxide insulating layer is silicon oxide formed by a reactive gas containing TEOS.

Claim 19(Previously presented): A method of forming a self-aligned contact hole as claimed in Claim 16, wherein the nitride etching stop layer is silicon nitride.

Claim 20(Previously presented): A method of forming a self-aligned contact hole as claimed in Claim 16, wherein the nitride etching stop layer is silicon oxy-nitride.

Claim 21(Previously presented): A method of forming a self-aligned contact hole as claimed in Claim 16, wherein the etching gas further comprises an inert gas.

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Claim 22(Previously presented): A method of forming a self-aligned contact hole as claimed in Claim 21, wherein the inert gas is argon gas.
